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Financing for Development:
Infrastructure Development in the Pacific Islands

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This discussion paper was prepared by ESCAP Pacific Office.

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1. CHALLENGES TO INFRASTRUCTURE FINANCING IN THE PACIFIC ISLANDS

While infrastructure development in the Pacific islands has increased significantly in recent years, challenges remain in accessing sufficient and appropriate financing. However, only limited information is available on the extent of infrastructure needs for most Pacific island countries. A World Bank report in 2006 on the infrastructure challenge in the Pacific alluded to this point providing anecdotal evidence for Fiji, PNG and Solomon Islands to suggest that the infrastructure investment funding required is indeed ‘substantial’.

ESCAP (2010) computed a composite measure to get a sense of the infrastructural development levels in Asia and the Pacific for 2007. The composite measure captured aspects of transport infrastructure (roads, railways and air transport density), ICT infrastructure (telephone and internet density), energy availability (intensity of energy use) and banking infrastructure (bank branches density). The report found that Pacific island countries Papua New Guinea (PNG), Solomon Islands, Vanuatu, Samoa, Tonga, and Fiji all ranked in the lower half of infrastructure development (less than 0.15) index for Asia Pacific countries in 2007.

Information on funding gaps and needs are more widely available for other regions though. In Asia, a recent report by Price Waterhouse Coopers (2014) stated that between 2010 and 2020, Asia will need to spend approximately US$8 trillion in infrastructure investment in order to maintain current levels of economic growth. Key sectors for investment include power for the growth of manufacturing, water for industry and people and transportation networks for movement of goods and people. In continental Africa, it has been estimated that the total cost of implementing all the projects identified by the Programme of Infrastructure Development in Africa to address projected infrastructure needs by 2040 is US$360 billion. PIDA has identified 51 priority infrastructure projects in its Priority Action Plan (PAP), which comprises 51 priority infrastructure programmes in energy, water, transport and ICT and requires investment of US$68 billion by 2020.

Another serious challenge that Pacific island countries encounter is the high costs of infrastructure maintenance. Most Pacific island countries do not have, or do not plan for, sufficient funding towards maintaining completed infrastructure projects resulting in fast deterioration which often leads to requests for ‘major rehabilitation’. Tonga and now Fiji are going through substantial ‘road rehabilitation projects’. One report (SPC and others, 2013) termed this behaviour as the ‘build-neglect-rebuild paradigm’ as countries do not prioritize infrastructure maintenance in their budget allocations. It is estimated that the cost of maintaining existing infrastructure is around 6% of Pacific islands countries GDP equating to around US$1,266 million per annum (PRIF, 2013) – far above what is actually spent.
2. PACIFIC INFRASTRUCTURE DEVELOPMENT

In recent years, the Pacific Regional Infrastructure Facility (PRIF) has played a vital role in coordinating infrastructure development in the Pacific. PRIF was established in 2008 as a multi-development partnership for better infrastructure in Pacific island countries. Infrastructure projects through PRIF are supported by the Asian Development Bank, Australian Government, European Union, European Investment Bank, Japan International Cooperation Agency, New Zealand Ministry for Foreign Affairs and Trade and the World Bank Group. Its overall goal is to promote and support broad-based growth and improved living standards for all people in 12 Pacific island countries (PICs). PRIF supports five key economic infrastructure sectors: energy/power; telecommunications; transport (roads and bridges, maritime transport (ports and shipping), aviation); solid waste management; and water supply and sanitation.

PRIF provides a mechanism for infrastructure financing that blends PRIF grants, multilateral loans, government budgets & private sector equity/loans. PRIF also offers advisory services for sector planning, policy, regulatory and institutional reforms, capacity development and brokerage of investment activities. In addition, the Facility acts as a knowledge hub for information sharing, benchmarking and sharing of best practices.

Since 2009, PRIF Members have injected a total investment in infrastructure projects of around US$2,031 million to the 12 Pacific island countries. Samoa, Solomon Islands, Vanuatu and Tonga received the most infrastructural investment since August 2009 amounting to nearly 55% of total funding (see figure 1).

Figure 1. Total PRIF Investment

![Figure 1. Total PRIF Investment](http://www.theprif.com)


The Asian Development Bank (ADB) and Australia’s Department of Foreign Affairs and Trade (DFAT) accounted for more than half of the total value of investments. Involvement of the multilateral development banks – ADB and the World Bank - is substantial with around 49% of the total investment by PRIF members since 2009 (see figure 2). As of December 2014, about 68% of infrastructural projects coordinated by PRIF in the Pacific islands are active or ongoing, 27% are completed projects; and 5% in the pipeline.

1 Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.
PRIF managed infrastructure projects now represent a substantial share of total infrastructure investment in many PICs. All infrastructure investment in Niue and nearly 90% of investment in Vanuatu is channeled through the PRIF mechanism (see table 1).

Table 1. PRIF mechanisms

<table>
<thead>
<tr>
<th>No.</th>
<th>Other Donors</th>
<th>Destination</th>
<th>Percentage Share of Total Infrastructure Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>ADB &amp; JICA</td>
<td>Palau</td>
<td>66% &amp; 32% respectively.</td>
</tr>
<tr>
<td>2.</td>
<td>ADB, DFAT &amp; JICA</td>
<td>Vanuatu</td>
<td>89%</td>
</tr>
<tr>
<td>3.</td>
<td>JICA, NZMFAT &amp; WBG</td>
<td>Tuvalu</td>
<td>78%</td>
</tr>
<tr>
<td>4.</td>
<td>ADB</td>
<td>FSM</td>
<td>72%</td>
</tr>
<tr>
<td>5.</td>
<td>NZMFAT</td>
<td>Cook Islands</td>
<td>67%</td>
</tr>
<tr>
<td>6.</td>
<td>NZMFAT &amp; EU</td>
<td>Niue</td>
<td>All Projects</td>
</tr>
<tr>
<td>7.</td>
<td>World Bank &amp; DFAT</td>
<td>Kiribati</td>
<td>48% &amp; 29% respectively.</td>
</tr>
<tr>
<td>8.</td>
<td>JICA &amp; DFAT</td>
<td>RMI</td>
<td>45%</td>
</tr>
</tbody>
</table>


Note: Since 2009, and as of December 2014.

Most of infrastructural investments coordinated by PRIF members are in the forms of loans, grants and technical assistance (TA). The data from 2012 onwards suggests roughly 28% of all investment in loans, 21% in TA and 30% in grants (PRIF, 2015). Majority of the infrastructure projects (both pipeline and current projects as of February 2015) are in the energy sector (32%, 87 projects) followed by transport (25%, 68 projects), and water and sanitation (20%, 53 projects). See figure 3.
3. FINANCING INFRASTRUCTURE DEVELOPMENT THROUGH PUBLIC-PRIVATE PARTNERSHIPS (PPP) IN THE PACIFIC

While the role of the private sector towards funding of infrastructure development is critical, PPPs in the Pacific region have shown mixed results. One key reason is that in many PICs SOEs remains the main mechanism for provision of infrastructure related services. Although much work has been done in reforming SOEs and moving some into the private sector, the performance of most SOEs has been disappointing. The inefficiency of SOEs has therefore tended to push up the already high cost of providing infrastructure in scattered and isolated islands. A recent ADB (2014) report found that SOEs in six Pacific island countries with available data did not produce sufficient return to cover capital costs between 2002 and 2012. Only four out of the six Pacific island countries produced average returns on assets and equity above zero over this period (see figure 4).

Figure 4. SOEs portfolio performance

Nevertheless, governments in the region have implemented various types of regulatory reform policies (privatisation including PPPs) to improve SOEs performances (see table 2).

**Table 2. SOEs performances**

<table>
<thead>
<tr>
<th>Country</th>
<th>Reform Milestone</th>
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<tbody>
<tr>
<td>Fiji</td>
<td>• Corporatizing the Water Authority, Roads Authority, and Government Printer and Stationery Department;</td>
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<tr>
<td></td>
<td>• Privatizing Fiji Dairy and preparing privatization options for Copra Millers and the Government Printer;</td>
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<td></td>
<td>• Implementing an operations and maintenance contract for Suva and Lautoka ports; and</td>
</tr>
<tr>
<td></td>
<td>• Preparing three SOEs for listing on the Fiji Stock Exchange.</td>
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<tr>
<td></td>
<td>• Approving an SOE reform policy in 2012; and</td>
</tr>
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<td></td>
<td>• Introducing the resulting SOE Bill into Parliament in 2013.</td>
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<tr>
<td>Papua New Guinea</td>
<td>• Approving a comprehensive community service obligations (CSO) policy in 2013 for implementation in 2014;</td>
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<td></td>
<td>• Endorsing draft PPP legislation in 2013;</td>
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<tr>
<td></td>
<td>• Amending the Independent Public Business Corporation (IPBC) Act in 2012, resulting in improved SOE oversight; publishing IPBC accounts in 2011;</td>
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<td></td>
<td>• Commencing the formulation of a new SOE policy framework.</td>
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<td>Samoa</td>
<td>• Privatizing Samoa Broadcasting Corporation in 2008 and SamoaTel in 2010;</td>
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<td></td>
<td>• Establishing the Independent Selection Committee in 2010 to manage SOE director selection;</td>
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<td></td>
<td>• Appointing 180 new directors to SOE boards and removing elected officials following the Composition of Boards of Public Bodies Act 2012; and</td>
</tr>
<tr>
<td></td>
<td>• Preparing Agriculture Stores Corporation for privatization.</td>
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<tr>
<td>Solomon Islands</td>
<td>• Divesting four SOEs since 2008;</td>
</tr>
<tr>
<td></td>
<td>• Enacting the SOE Act in 2007 and supporting regulations in 2010;</td>
</tr>
<tr>
<td></td>
<td>• Restructuring three major SOEs since 2010 and approving tariff increases for the water and power SOEs;</td>
</tr>
<tr>
<td></td>
<td>• Completing CSO contracts for selected SOEs; and integrating the process into the 2013 and 2014 budgets.</td>
</tr>
<tr>
<td>Tonga</td>
<td>• Privatizing Leiola Duty Free in 2007;</td>
</tr>
<tr>
<td></td>
<td>• Liquidating three SOEs;</td>
</tr>
<tr>
<td></td>
<td>• Awarding six CSO contracts, two to the private sector;</td>
</tr>
<tr>
<td></td>
<td>• Implementing skills-based SOE director selection in 2013;</td>
</tr>
<tr>
<td></td>
<td>• Strengthening the SOE Act in 2010; and</td>
</tr>
<tr>
<td></td>
<td>• Publishing SOE results in local newspapers from 2010.</td>
</tr>
</tbody>
</table>


Despite the overall picture of limited progress, there are many examples of successful involvement of the private sector. The Sasape Marina reform in the Solomon Islands (ADB, 2014) is one of them. In early 2007, the Government of Solomon Islands decided to find a private investor and operator for Sasape Marina Limited (SML), a shipyard facility. The SOE’s financial and operating position had deteriorated, with
government’s equity falling from SI$14 million in 1996 to around SI$3 million in 2005 (the last year with a financial statement available). The government turned to the private sector and decided that a public–private partnership (PPP) would be the best way to achieve the government’s objectives and rapidly installed a new operator. A Solomon Islands shipping operator partnered with the Solomon Islands National Provident Fund to provide a SI$21 million capital injection and rehabilitate and expand the slipway. This made it uniquely capable of servicing the large vessel repairs for the Solomon Islands shipping industry. Construction was completed in 2012 and renamed as Sasape International Shipyard Limited (SISL) with a new 520-ton slipway, employing more than 50 previously unemployed local people. The slipway is the major employer for the 1,750 people living on the small island of Tulagi. Cash has started to flow into the local economy, fuelling the reestablishment of the market. With the proceeds from the sale of SML’s assets, the Solomon Islands government was able to finance restructuring costs and repay SML’s outstanding debts.

The PPP arrangement for the Virgin Samoa Airlines is another success story for aviation sector in the Pacific. This is a joint venture between the government of Samoa and Australia’s Virgin Blue, a low-cost carrier, which turned an annual US$7.5 million government subsidy into a US$6.9 million profit in just two years. The International Financial Corporation (IFC) of the World Bank Group helped develop the PPP contract which established the new national airline in September 2005.

Since then, according to an IFC survey (2013), 243,000 people received improved airline service as a result of the 130% increase in seat capacity, and consumers saved US$57.7 million in reduced airfares between 2005 and 2009. In addition investment in the venture rose to more than double the originally anticipated US$5 million over the life of the project. Since 2005, indirect tax collection from additional tourist arrivals is estimated at US$1.86 million, and the total positive fiscal impact over the life of the project is $6.9 million. Indirect benefits of resulting expansion in tourist facilities created 671 jobs and increased national salaries and wages by US$1.4 million.

Other PPP success stories in the region include Fiji, PNG, Solomon Islands, and Tonga where government has contracted out subsidized ferry services to private sector providers. Tonga and Fiji have PPP contracts for electricity generation, and Fiji recently contracted out management of the Suva and Lautoka ports. PNG has developed a PPP policy and contracts for water supply, electricity generation, and shipping services. Samoa has successfully contracted out road maintenance services, resulting in a 400% increase in productivity, and developed a wastewater treatment facility on a build–operate–transfer basis (ADB, 2014).

While infrastructure development is critical for improving growth prospects in Pacific Island Countries, the vastness of the Pacific Ocean and the rugged nature of many islands impose high costs and challenges. Improving the efficiency of infrastructure services will help, but there is a need to take an appropriately long term view of the benefits of infrastructure development and its maintenance. In particular, there is a need to manage and stimulate the expected benefits from new infrastructure rather than expecting the ‘market’ to bring the benefits without intervention.
4. FINANCING CLIMATE CHANGE ADAPTATION AND MITIGATION IN THE PACIFIC

Improving access to, and management of, climate change resources for addressing national priorities and working to improve national capacity has been the focus of policy makers in the Pacific over the past few years.

Pacific island countries have considered a number of different modalities at the national, regional and international level that might help countries increase their access to climate change resources, as well as provide with a framework for flexible management of these resources for more efficient implementation. It is clear that there is no one size fits all approach. With the varying sources of funds available and different capacities of countries, a mix of modalities need to be considered for implementation simultaneously. There are clearly some modalities that have been tested and proved to provide means for more effective access and management while maintaining consistency with best practice principles of aid effectiveness and donor harmonisation, use of country systems and strengthening existing mechanisms to provide better services to Pacific countries and their particular circumstances. Pacific Economic Ministers’ and Leaders’ meetings have agreed to budgetary support mechanisms as the preferred modality.

Modalities discussed in the Pacific:

These include direct budgetary support (and sectoral support) which presents one of the most effective modalities to address climate change challenges in a sustainable way. Use of national systems is the preferred modality and policy makers have noted that where national systems have existing or emerging capability gaps then existing technical assistance facilities need to be utilised to assist countries to address those gaps. This can be achieved either through capacity building and/or supplementation. The degree to which this issue is successful depends heavily on the way in which climate change priorities are reflection of climate change priorities and challenges within national and sector plans and their budgets. It requires robust, transparent and accountable public financial management systems and an M&E framework that provides accountability at the national level and for development partners.

National Trust Fund arrangements have been tried and tested in the Pacific region for some time and offer a very good modality for climate change resources to accrue over time and facilitate disbursement rates that are commensurate with the capacity (human, institutional, and absorptive). Building on existing trust arrangements offers a good option (for example, augmenting the Tuvalu Trust fund to accommodate climate change funds).

A regional or sub-regional fund can present significant benefits in well-defined sectors/areas such as infrastructure, specific health challenges, and energy. The application of such models to broad areas like climate change may present more difficulties in designing the appropriate governance, equity, financial management and instruments. It is clear that the design of any fund must be based on clearly articulated needs and requirements by participating recipient and donor partners. Given the limited institutional capacity of some smaller Pacific nations, a sub-regional fund also has the potential to provide economies of scale and reduced overall administrative costs of several individual funds.
A regional technical support mechanism that would identify funding opportunities and provide technical assistance for completing application procedures to access donor funds and implementation is being explored through the Council of Regional Organizations in the Pacific (CROP).

*Examples of innovative initiatives include:*

Palau is using its National Development Bank as a financing vehicle for subsidy administration of donor funds for an Energy Efficient Subsidy Program. Home loans incorporate specific energy efficiency measure and products for new home construction with a subsidy element incorporated into mortgage repayments. Challenges have arisen over getting the right products for local conditions and in the technical awareness of contractors and bank staff.

The Cook Islands is has overcome national capacity constraints to become accredited as a National Implementing Entity to the Adaptation Fund. The country is seeking direct access to global funds to enable swifter implementation of adaptation measures and to better manage these funds and their coherence with other donor funds through existing national systems. The accreditation process has been a long one involving capacity assessments of the Ministry of Finance as well as current assistance to help complete the application process.
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